Attorney Docket No.: P-3558-US



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): WHITT, Michael A. et al. Examiner: Not yet known

Serial No.: 10/656,894 Group Art Unit: Not yet known

Filed: September 8, 2003

Title: RECOMBINANT MUTANTS OF RHABDOVIRUS AND METHODS OF USE

THEREOF

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, this Information Disclosure Statement includes Form PTO-1449:

1. 🛛	listing documents including patents, publications and other information for consideration
	by the Examiner, however, since the subject application was filed after June 30, 2003,
	copies of United States patents, and/or United States patent applications, and/or United
	States patent application publications are not included in this information disclosure
	statement; and/or
2. 🔲	listing documents including patents, publications and other information that have been
	previously cited or submitted to the Patent Office in prior application U.S. Serial No.
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4. Isiting other information for the Examiner's consideration which was cited in a communication from a foreign patent office in a counterpart foreign application, a copy of which is included with this information disclosure statement.

The information herein cited is only in fulfillment of Applicant(s) duty of candor in disclosing all information brought to Applicant(s) attention. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art". If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant(s) reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve(s) the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each and every document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application and is evidence that the Examiner has considered the document.

This Information Disclosure Statement is being filed:

I) Within three (3) months of filing the subject Application or entry of the
subject Application into the national stage or before mailing of the first Office Action on
the merits of the subject Application or a request for continued examination thereof,
whichever event occurs last pursuant to of 37 C.F.R §1.97 (b); or
II) After the period specified in (I) but before the mailing date of either a final
Official Action under 37 C.F.R §1.113 or a notice of allowance under 37 C.F.R §1.311
whichever occurs first and;
1.
the Form PTO-1449 was either (i) cited in a communication from a foreign patent

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the filing of this Information Disclosure Statement or (ii) not cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, not known to any individual designated in §1.56(c) more than three (3) months prior to the filing of this information disclosure statement; or

	know	n to any individual designated in §1.56(c) more than three (3) months prior to
	the fil	ing of this information disclosure statement; or
	2.	the undersigned hereby authorizes the Patent Office to charge the fee
	in the	amount of \$180.00 under 37 C.F.R §1.17 (p) to Deposit Account 05-0649.
III)		After the period in (I) and (II) but before the payment of the issue fee and,
	1.	The undersigned hereby states:
		a)
		was cited in a communication from a foreign Patent Office in a counterpart
		foreign application not more than three (3) months prior to the filing of this
		Information Disclosure Statement; or
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		was cited in a communication from a foreign patent office in a counterpart
		foreign application, and to the knowledge of the undersigned after making
		reasonable inquiry, no item of information contained in this Information
		Disclosure Statement was known to any individual designated in 37 C.F.R. §
		1.56(c) more than three months prior to the filing of this Information
		Disclosure Statement; and
	2.	The undersigned hereby authorizes the Patent Office to charge the
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Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 05-0649.

Mark S. Cohen

Attorney for Applicant(s) Registration No. 42,425

Respectfully submitted,

Dated: November 8, 2004

Eitan, Pearl, Latzer & Cohen Zedek, LLP.

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Tel: (212) 632-3480 Fax: (212) 632-3490

Signature

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<u> </u>			1449A/PTO	Complete if Known			
1 6 500°	, 필		. 1440/01 10	Application Number	10/656,894		
		TION	DISCLOSURE	Filing Date	September 8, 2003		
ST.	EME	NT B	DISCLOSURE Y APPLICANT	First Named Inventor	WHITT, Michael A.		
CAT & TRAD	~			Group Art Unit	Not yet known		
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Sheet	1	of	4	Attorney Docket Number	P-3558-US		

			U.	S. PATENT DOCUMENTS		
Examiner Initials*	Cite No.1	U.S. Patent Number	Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Α	5,547,932		Curiel et al	August 20, 1996	
	В	5,677,178		McConnick et al	October 14, 1997	
	С	5,622,856		Natsoulis et al	April 22, 1997	
	D	5,646,034		Mamounas et al	July 8, 1997	
	E	5,693,509		Cotton et al	December 2, 1997	
	F	5,589,377		Lebkowski et al	December 31, 1996	
	G	5,616,487		Palsson et al	April 1, 1997	
	Н	5,63,756		Kayman et al	July 1, 1997	
	l	5,654,195		Sodroski et al	August 5, 1997	
	J	5,512,421		Burns et al	April 30, 1996	
	K	5,670,354		Burns et al	September 23, 1997	
	L	5,585,254		Maxwell et al	December 17, 1996	
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	gnPatent D Number ⁴ (ind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	Т
Office ³	Number⁴ ((ind Code⁵ if known)		Cited Document	Where Relevant Passages or Relevant	7
_	_				Figures Appear	
	III					[[
				Date	Date	Date

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸ Applicant is to place a check mark here if English language Translation is attached.

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	Substitut	e for fo	rm 1449B/PTO	Complete if Known		
				Application Number	10/656,894	
INFO	RMA	TION	I DISCLOSURE	Filing Date	September 8, 2003	
STA	TEME	NT E	BY APPLICANT	First Named Inventor	WHITT, Michael A.	
				Group Art Unit	Not yet known	
(us	se as ma	ny sh	eets as necessary)	Examiner Name	Not yet known	
Sheet	2	of	4	Attorney Docket Number	P-3558-US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	М	Rose et al, Rhabdoviridae: The viruses and their replication, in Fields Virology, Chapter 8, 4 th edition, pp. 1221-1244, 2001	
	N	Whitt M.A., "Genetic Manipulation of Rhabdoviruses: New Insights to Virus Replication, Transcription and Assembly" (1998) The Journal of Microbiology 36: 1-8,	
	0	Mar et al "A conserved CATTCCT motif is required for skeletal muscle-specific activity of the cardiac troponin T gene promoter" (1988) Proc. Natl. Acad. Sci. USA 85:6404	
	Р	Mader, S. et al "A steroid-inducible promoter for the controlled overexpression of cloned genes in eukaryotic cells" (1993) Proc. Natl. Acad. Sci. USA 90:5603-5607	
	Q	Spencer, D.M. et al (1993), Science 262:1019-102, American Association for the advancement of Science.	
i	R	Manome, Y. et al. "Coinduction of c-jun Gene Expression and Internucleosomal DNA Fragmentation by Ionizing Radiation" (1993) Biochemistry 32:10607-10613, American Chemistry Society	
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	T	Fuerst T. R. el al "Eukaryotic transient-expression system based on recombinant vaccinia virus that synthesizes bacteriophage T7 RNA polymerase" (1986) Proc. Natl. Acad. Sci. USA 3. 8122-26, Biochemistry	
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	V	Rodriguez et al Regulated Expression of Nuclear Genes by T3 RNA Polymerase and <i>lac</i> Repressor, Using Recombinant Vaccinia Virus Vectors" (1990) J. Virol. 64: 4851:4857, American Society for Microbiology	
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	Х	Baltimore David et al "Ribonecleic Acid Synthesis of Vesicular Stomatitits Virus, II. An RNA Polymerase in the Virion" Proceedings of the National Academy of Sciences, Vol. 66, No. 2, pp. 572-576, June 1970	

Examiner Date Signature Considered	
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Sheet	2	of	4	Attorney Docket Number	P-3558-US	

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	Y	Chu, Te-Hua Tearina et al., "Toward Highly Efficient Cell-Type Specific Gene Transfer with Retroviral Vectors Displaying Single-Chain Antibodies", Journal of Virolgoy, Vol. 71, No. 1, pp. 720-725, Jan 1997.	
	Z	Dolter, Karen E. et al., Incorporation of CD4 into Virions by a Recombinant Herpes Simplex Virus. Journal of Virology, Vol. 67, No. 1, pp. 189-195, January 1993.	
	AA	Fuerst, Thomas R. et al., Use of a Hybrid Vaccinia Virus-T7 RNA Polymerase System for Expression of Target Genes, Molecular and Cellular Biology, Vol. 7, No.7, pp. 2538-2544, July 1987.	
	АВ	Galmiche, Marie C. et al., Expression of a functional single chain antibody on the surface of extracellular enveloped vaccinia virus as a step towards selective tumor cell targeting, Journal of General Virology. Vol. 78, pp. 3019-3027, November 1997.	
	AC	Johnson, J. Erik et al., Specific Targeting to CD4+ Cells of Recombinant Vesicular Stomatitis Viruses Encoding Human Immunodeficiency Virus Envelope Proteins. Journal of Virology. Vol. 71, No. 7, pp. 5060-5068, July 1997.	
	AD	Lamb, Robert A., MINIREVIEW: Paramyxovirus Fusion: A Hypothesis for Changes. Virology. Vol. 197, pp. 1-11, 1993	
	AE	Marin, Mariana et al., Targeted Infection of Human Cells via Major Histocompatibility Complex Class I Molecules by Moloney Murine Leukemia Virus-Derived Viruses Displaying Single-Chain Antibody Fragment-Envelope Fusion Proteins. Journal of Virology. Vol. 70, No. 5, pp. 2957-2962, May 1996	
	AF	Mebatsion, Teshome et al., Budding of Rabies Virus Particles in the Absence of the Spike Glycoprotein Cell. Vol. 84, pp. 941-951, March 22, 1996.	
	AG	Mebatsion, Teshome et al., A CXCR4/CD4 Pseudotype Rhabdovirus That Selectively Infects HTV-I Envelope Protein-Expressing Cells, Cell, Vol. 90, pp 841-847, September 5, 1997.	
	АН	Mebatsion, Teshome et al., Specific infection of CD4+ target cells by recombinant rabies virus pseudotypes carrying the HTV-1 envelope spike protein. Proc. Natl. Acad. Sci., USA. Vol. 93, pp. 11366-11370, October 1996	
	AI	Nolan, Garry P., Harnessing Viral Devices as Pharmaceuticals: Fighting HTV-l's Fire with Fire, Cell, Vol. 90, pp. 821-824, September 5, 1997	

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Signature	Considered

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Sheet	4	of	4	Attorney Docket Number	P-3558-US	

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	AJ	Pattnaik, Asit K. et al., Cells that express all five proteins of vesicular stomatitis virus from cloned cDNAs support replication, assembly, and budding of defective interfering particles. Proc. Natl. Acad. Sci. USA. Vol. 88, pp. 1379-1383, February 1991	
	AK	Pattnaik, Asit K. et al., Infectious Defective Interfering Particles of VSV from Transcripts of a cDNA Clone, Cell, Vol. 69, pp. 1011-1020, June 12, 1992	
	AL	Pattnaik, Asit K. et al., Replication and Amplification of Defective Interfering Particle RNAs of Vesicular Stomatitis Virus in Cells Expressing Viral Proteins from Vectors Containing Cloned cDNAs. Journal of Virology, Vol. 64, No. 6, pp. 2948-2957, June 1990.	
	AM		
	AN	Schnell, Matthias J. et al., Infectious rabies viruses from cloned cDNA. The EMBO Journal. Vol. 13, No. 18, pp. 4195-4203, 1994	
	AO	Schnell, Matthias J. et al., Construction of a Novel Virus That Targets HTV-1-Infected Cells and Controls HTV-1 Infection, Cell, Vol. 90, pp. 849-857, September 5, 1997	
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	AQ	Takada, Ayato et al., A system for functional analysis of Ebola virus glvcoprotein. Proc. Natl Acad. Sci. USA, Vol. 94, pp. 14764-14769, December 1997	
	AR	Wertz, Gail W. et al., Extent of terminal complementarity modulates the balance between transcription and replication of vesicular stomatitis virus RNA, Proc. Natl. Acad. Sci. USA, Vol. 91, pp. 8587-8591, August 1994	
	AS	Whelan, Sean P.J. et al., Efficient recovery of infectious vesicular stomatitis virus entirely from cDNA clones, Proc. Natl. Acad. Sci. USA, Vol. 92, pp. 8388-8392, August 1995	
	AT	Young, John A. T. et al., Efficient Incorporation of Human CD4 Protein into Avian Leukosis Virus Particles, Science. Vol. 250, pp. 1421-1423, December 7, 1990	

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